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(71) Applicant: Giatec Scientific Inc.
Nepean, ON K2H 9E8 (CA)

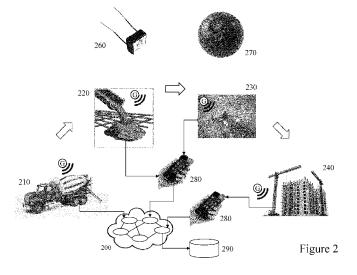
(72) Inventors:

- POURIA, Ghods Ontario, K1V 2M3 (CA)
- ROUHOLLAH, Alizadeh Ontario, K2J 5T7 (CA)
- SALEHI, Mustafa Ontario, K1S 4L9 (CA)
- De CARUFEL, Sarah Ontario, K1S 4L9 (CA)
- (74) Representative: Murgitroyd & Company 165-169 Scotland Street Glasgow G5 8PL (GB)

(54) EMBEDDED WIRELESS MONITORING SENSORS

(57) Concrete can be one of the most durable building materials where consumption is projected to reach approximately 40 billion tons in 2017 alone. Despite this the testing of concrete at all stages of its life cycle is still in its infancy although testing for corrosion is well established. Further many of the tests today are time consuming, expensive, and provide results only after it has been poured and set. Accordingly, by exploiting self-contained wireless sensor devices, which are deployed with the wet

concrete, the in-situ curing and maturity measurement data can be established and employed together with batch specific concrete data to provide rapid initial tests and evolving performance data regarding the concrete cure, performance, corrosion of concrete at different points in its life cycle. Such sensors remove subjectivity, allow for rapid assessment, are integrable to the construction process, and provided full life cycle assessment.





EUROPEAN SEARCH REPORT

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EP 24 19 5746

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